Claims

1.-13. (cancelled)

14. (new) A method for transparently exchanging data packets
with a packet-oriented network via which a number of network
elements and a network node device are connected, the network
elements having

unique addresses only within the packet-oriented network,

the packet-oriented network connected to an external device
by the network node device, and

the unique address of a network element converted into an
address valid for the external device by the network node
device, the method comprising:

setting up a connection between a first network element and
the external device; and

verifying message header entries of data packets exchanged
between the external device and the first network element,
wherein

if a message header entry characterizing an expanded
packet-oriented protocol is detected, a temporarily transparent
connection is established between the first network element and
the external device, and wherein

the unique address of the first network element is
transferred to the external device without being converted by
the network node device.

15. (new) The method according to Claim 14, wherein the address
of the first network element is assigned by the external device
while the connection is set up between the first network
element and the external device.

16. (new) The method according to Claim 14, wherein a
modulation/demodulation device is arranged between the external

device and the network node device.

17. (new) The method according to Claim 15, wherein a modulation/demodulation device is arranged between the external device and the network node device.

18. (new) The method according to Claim 14, wherein a verification is carried out before the transparent connection for the first network element is set up, to determine whether a connection of the same type already exists for at least one other network element or for the network node device.

19. (new) The method according to Claim 15, wherein a verification is carried out before the transparent connection for the first network element is set up, to determine whether a connection of the same type already exists for at least one other network element or for the network node device.

20. (new) The method according to Claim 16, wherein a verification is carried out before the transparent connection for the first network element is set up, to determine whether a connection of the same type already exists for at least one other network element or for the network node device.

21. (new) The method according to Claim 14, wherein a maximum number of transparent connections is defined depending on the specifications of the external device.

22. (new) The method according to Claim 15, wherein a maximum number of transparent connections is defined depending on the specifications of the external device.

23. (new) The method according to Claim 21, wherein the establishment of the transparent connection of the first

network element is rejected.

24. (new) The method according to Claim 21, wherein an existing connection to a network element is canceled and the transparent connection of a further network element is then established.

25. (new) The method according to Claim 14, wherein an existing transparent connection is terminated as soon as a connection release request is detected.

26. (new) The method according to Claim 25, wherein the connection release request is triggered when a predefined time period, during which no data packets have been exchanged according to the expanded packet-oriented protocol, has been exceeded.

27. (new) The method according to Claim 14, wherein the communication of the network elements with one another and/or with the network node device is alternatively effected either according to the Internet protocol or according to the PPPoE communication protocol.

28. (new) A network node element for supporting a transparent exchange of data packets, comprising:

     at least one network interface to a packet-oriented network connecting a plurality of network elements, wherein the network elements are allocated unique addresses only within the network;

     at least one network interface to an external device;

     at least one routing unit for converting of the unique address of a network element into an address valid for the external device;

     at least one monitoring unit for monitoring message header entries of the data packets exchanged between the external

device and a first network element, wherein the monitoring unit
is configured to detect a message header entry characterizing
an expanded packet-oriented protocol and to establish a
temporarily transparent connection between the first network
element and the external device, and whereby no address
conversion of an address allocated to the first network element
by the external device for the duration of the transparent
connection is performed.

29. (new) The network node element according to Claim 28,
wherein the network node element is configured as a router.

30. (new) The network node element according to Claim 28,
wherein the monitoring unit controls at least one bridging
device.

31. (new) The network node element according to Claim 29,
wherein the monitoring unit controls at least one bridging
device.